

CLAIMS

1. An isolated polypeptide comprising a sequence selected from:
  - 5 (i) the amino acid sequence of SEQ ID NO: 2;
  - (ii) an allelic or species variant of a sequence of (i);
  - (iii) a variant of a sequence of (i) having at least 60% identity over the full length of SEQ ID NO: 2 and having substantially similar function selected from immunomodulatory activity and/or anti-viral activity and/or anti-tumour activity; or
  - 10 (iv) a fragment of (i) or (ii) which does not have the amino acid sequence of SEQ ID NO: 4, an allelic or species variant of the sequence of SEQ ID NO: 4 or a fragment thereof and which retains substantially similar function selected from
  - 15 immunomodulatory activity and/or anti-viral activity and/or anti-tumour activity.
2. A variant or fragment of the polypeptide defined by the amino acid sequence set forth in SEQ. ID. No. 2 suitable for raising specific antibodies for said
- 20 polypeptide and/or an allelic or species variant thereof.
3. A polynucleotide encoding a polypeptide as claimed in claim 1 or 2.
4. A polynucleotide as claimed in claim 3 which is a cDNA.
- 25 5. A polynucleotide encoding a polypeptide as claimed in claim 1, which polynucleotide comprises:
  - (a) the nucleic acid sequence of SEQ ID NO: 1 or the coding sequence thereof and/or a sequence complementary thereto;
  - 30 (b) a sequence which hybridises to a sequence as defined in (a);
  - (c) a sequence that is degenerate as a result of the genetic code to a sequence as defined in (a) or (b); or

(d) a sequence having at least 60% identity to a sequence as defined in (a), (b) or (c).

6. An expression vector comprising a polynucleotide sequence as claimed in any one of claims 3 to 5, which is capable of expressing a polypeptide according to claim 1 or 2.
7. A host cell containing an expression vector according to claim 6.
8. An antibody specific for a polypeptide as claimed in claim 1 or claim 2.
9. An isolated polynucleotide which directs expression *in vivo* of a polypeptide as claimed in claim 1.
10. A polypeptide as claimed in claim 1 or a polynucleotide as claimed in claim 9 for use in therapeutic treatment of a human or non-human animal.
11. A pharmaceutical composition comprising a polypeptide as claimed in claim 1 or a polynucleotide as claimed in claim 9 and a pharmaceutically acceptable carrier or diluent.
12. Use of a polypeptide as claimed in claim 1 or a polynucleotide as claimed in claim 9 in the preparation of medicament for use in therapy as an anti-viral, anti-tumour or immunomodulatory agent.
13. A method of treating a patient having a Type 1 interferon treatable disease, which comprises administering to said patient an effective amount of a polypeptide as claimed in claim 1 or a polynucleotide as claimed in claim 9.
14. A method of producing a polypeptide according to claim 1 or 2, which method comprises culturing host cells as claimed in claim 7 under conditions suitable for obtaining expression of the polypeptide and isolating the said polypeptide.

15. A method of identifying a compound having immunomodulatory activity and/or anti-viral activity and/or anti-tumour activity comprising providing a cell capable of expressing the polypeptide of SEQ. ID. No. 2 or a naturally-occurring variant thereof having at least 60 % identity over the full length of SEQ ID NO: 2, incubating said cell with a compound under test and monitoring for upregulation of the gene encoding said polypeptide or variant.
16. A polynucleotide capable of expressing *in vivo* an antisense sequence to a coding sequence for the amino acid sequence defined by SEQ. ID. No.2 or a naturally-occurring variant of said coding sequence having at least 60 % identity over the full length of said coding sequence for use in therapeutic treatment of a human or non-human animal.
17. An antibody as claimed in claim 8 for use in therapeutic treatment.
18. A set of primers for nucleic acid amplification which target sequences within a cDNA as claimed in claim 4.
19. A nucleic acid probe derived from a polynucleotide as claimed in any one of claims 3 to 5.
20. A probe as claimed in claim 19 which is attached to a solid support.
21. A method of predicting responsiveness of a patient to treatment with a Type 1 interferon, which comprises determining the level of the protein defined by the amino acid sequence set forth in SEQ. ID. No. 2 or a naturally-occurring variant thereof having at least 60 % identity over the full length of SEQ ID NO: 2, or the corresponding mRNA, in a cell sample from said patient, wherein said sample is obtained from said patient following administration of a Type 1 interferon or is treated prior to said determining with a Type 1 interferon *in vitro*.

22. A method as claimed in claim 21 wherein the interferon administered prior to obtaining said sample or used to treat said sample *in vitro* is the interferon proposed for treatment of said patient.
- 5 23. A method as claimed in claim 21 or claim 22 wherein a sample comprising peripheral blood mononuclear cells isolated from a blood sample of the patient is treated with a Type 1 interferon *in vitro*.
- 10 24. A method as claimed in any one of claims 21 to 23 wherein said determining comprises determining the level of mRNA encoding the protein defined by the sequence set forth in SEQ. ID. No. 2 or a naturally-occurring variant of said protein having at least 60% identity over the full length of SEQ ID NO: 2.
- 15 25. A non-human transgenic animal capable of expressing a polypeptide that is claimed in claim 1.